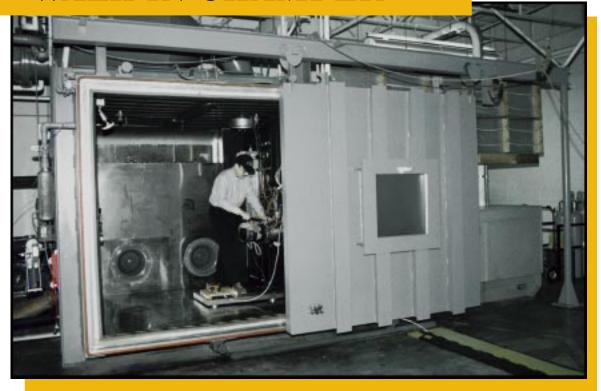
Environmental Laboratory WALK-IN CHAMBER



The Walk-In Chamber is used primarily to test aircraft generators and constant speed drives to simulate flight conditions of temperature and altitude with conditioned air and drive capabilities.

Environmental Laboratory Walk-In Chamber

The Environmental Walk-In Chamber consists of an internal volume measuring 7'x7'x7' (343 cubic feet) that is integrated with a 300 horsepower 30,000 rpm drive stand. This drive stand, in conjunction with the Walk-In Chamber, simulates various electrical loads and temperature/ altitude/humidity fluctuations that a generator/control unit would be exposed to when it is installed in a Navy aircraft deployed in the Fleet. This equipment provides the unique capability of testing aircraft generator/control units under various electrical load conditions. During this exposure, the unit is also subject to changes in temperature, altitude and/or humidity. Results from the testing indicated performance under real flight-time conditions.





Specifications

Temperature range: -73 degrees Celsius to +120 degrees Celsius

Altitude range: 0 feet to 100,000 feet

0 feet to 65,000 feet with full 40 lb/min

Conditioned air ranges: 2.5 lb/min to 40 lb/min

-70 degrees Celsius to +140 degrees Celsius

Drive Stand interface: 300 horsepower motor from 0 rpm to 30,000 rpm

Projects supported: Photos shows the testing of a TA-4J generator

For more information on the Electrical Power Systems Division contact the Naval Air Warfare Center Aircraft Center, Patuxent River, MD 20670 at 301-342-0823.